

WHAT IS CLAIMED IS:

1 . A spectrophotometer comprising:

an optical waveguide;

a light entrance slit provided at an end face on the inner side of the optical waveguide, for bringing an incident light into the optical waveguide;

an optical element provided at an end face on the inner side of said optical waveguide or at an interior of said optical waveguide, for separating the incident light brought in the optical waveguide into a spectrum; and

a photoelectric conversion device provided at an end face on the inner side of said optical waveguide, for detecting the incident light separated into the spectrum at said optical element;

wherein said optical waveguide, said light entrance slit, and said optical element are integrally formed on an optical waveguide board, and a photoelectric conversion device substrate having said photoelectric conversion device formed thereon is mounted on the optical waveguide board.

2 . A spectrophotometer comprising:

an optical waveguide;

a light entrance slit provided at an end face on the

inner side of the optical waveguide, for bringing incident light into the optical waveguide;

an optical element provided at an end face on the inner side of said optical waveguide or at an interior of said optical waveguide, for separating the incident light brought in the optical waveguide into a spectrum; and

a photoelectric conversion device provided at an end face on the inner side of said optical waveguide, for detecting the incident light separated into the spectrum at the optical element;

wherein said optical waveguide and said light entrance slit are integrally formed on an optical waveguide board, and an optical element substrate having said optical element formed thereon and a photoelectric conversion device substrate having said photoelectric conversion device formed thereon are mounted on the optical waveguide board.

3 . The spectrophotometer according to claim 2, wherein said optical element is formed on a surface of said optical element substrate etched into a curved configuration.

4 . The spectrophotometer according to claim 2, wherein said optical element is formed on a surface of a bendable optical element substrate and is mounted on said optical waveguide board with bending the optical element substrate.

5 . The spectrophotometer according to claim 2, wherein said optical element is formed on an optical element substrate having a region of the same height as the height of said optical waveguide, at a surface of said region of the same height.

6 . The spectrophotometer according to any one of claims 1 to 5, wherein said photoelectric conversion device is formed on a photoelectric conversion device substrate etched into a curved configuration.

7 . The spectrophotometer according to any one of claims 1 to 5, wherein said photoelectric conversion device is formed on a surface of a bendable photoelectric conversion device substrate and is mounted on said optical waveguide board with bending the photoelectric conversion device substrate.

8 . The spectrophotometer according to any one of claims 1 to 5, wherein said photoelectric conversion device is formed on a photoelectric conversion device substrate having a region of the same height as the height of said optical waveguide, at a surface of said region of the same height.

9 .        The spectrophotometer according to any one of claims 1 to 5, wherein a mounting portion for said photoelectric conversion device substrate of said optical waveguide board has a light receiving slit.